This response is submitted in response to an Office Action mailed September 11, 2007. Claims 1-40 were pending at the time the Office Action was issued. Applicant hereby amends Claims 1-8, 10-18 and 20-36, and 38-39, and cancels Claim 9. Claims 1-8 and 10-40 remain pending.

I.   EXAMINER INTERVIEW

Applicant respectfully expresses their appreciation to Examiner Lanier for the telephone interview held on November 27, 2007, during which the Examiner discussed the disposition of this case with the undersigned attorney. Specifically, the Examiner and the undersigned attorney discussed possible claim amendments to Claims 1 and 17, in view of the disclosure of U.S. 7,124,303 to Candelore et al. (hereinafter "Candelore"). No agreement was reached regarding the allowability of the claims.

II.   REJECTIONS UNDER 35 U.S.C. § 101

Claims 22-34 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Applicant has amended each of Claims 22-34 to recite "a computer-readable storage medium" instead of "a computer-readable medium". Accordingly, Applicant respectfully requests reconsideration and withdrawal of these rejections.

III.   REJECTIONS UNDER 35 U.S.C. § 112

Claim 16 is rejected under 35 U.S.C. §112, first paragraph. Applicant has amended Claim 16 depend from Claim 1, instead of as a dependent claim of Claim

13. Additionally, Applicant has also amended Claim 16 to recite additional limitations.

Claims 15 and 39 are rejected under 35 U.S.C. §112, second paragraph. Applicant has amended Claim 15 to recite "a location of the encrypted portion of the transport stream." Moreover, Applicant has amended Claim 39 to recite the limitation of "the determination" instead of "the analysis." Accordingly, Applicant respectfully requests reconsideration and withdrawal of these rejections.

IV. REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-15, 17-26, 28-40 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. 7,124,303 to Candelore. Respectfully, Applicant submits that the claims are allowable over Candelore for at least the reasons explained in detail below.

Claims 1-16

Claims 2-16 depend from Claim 1. Claim 1, as amended, recites:

> 1. A method, comprising:
> analyzing a transport stream that includes one or more header portions and one or more corresponding payload portions, each of the header portions includes at least one of a packtetized elementary stream (PES) header and a frame header, wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header; and
> preparing the transport stream for a data extraction by encrypting at least some of the payload portions while leaving the one or more corresponding header portions unencrypted at all times.

Applicant respectfully traverses this rejection. Specifically, Candelore does not teach or suggest, "preparing the transport stream for a data extraction by *encrypting* at least some of the payload portions while leaving the one or more corresponding header portions *unencrypted at all times*," as recited in Claim 1. (Emphasis added).

Rather, Candelore discloses an encryption scheme in which an audio signal 106 is encrypted while a video signal 104 is left "in the clear." (Column 6, Lines 5-46). In other words, Candelore discloses that all the audio data packets are encrypted, while all the video data packets are unencrypted. Accordingly, *in arguendo*, Candelore may nominally disclose that "header portions" (*e.g.,* "start of frame" packets in the video signal) are unencrypted at all times, while also disclose that at least some of the "payload portions" (*e.g.,* data packets in the audio signal) are encrypted. (Office Action, Page 6, Paragraph 4, noting that Candelore meets the limitations of the subject matter of the original Claims 10-11).

However, this interpretation of Candelore is contrary to the other claim limitation of Claim 1, which recites, "each of the *header portions* includes at least one of a packtetized elementary stream (PES) header and a frame header, wherein each of the *header portions* enables the processing of the *one or more corresponding payload portions based on at least one of the PES header and the frame header*." (Emphasis added).

In fact, the disclosure of Candelore teaches that video signal 104 and audio signal 106 are treated separately prior to being displayed on television set 44. Accordingly, it would not be possible to carry out a PES header-dependent processing of data packets in a *video signal* 104 of Candelore based on the PES headers in the "start of frame" data packets in an *audio signal* 106 of Candelore, or

vice versa, as the Office Action suggests is taught by Candelore. This is evident in the following relevant portion of Candelore:

> After distribution through the cable system 32, the video, system information, program specific information, Audio A and Audio B are all delivered to set-top boxes 36 and 136. At legacy STB 36, the video is displayed and the encrypted audio is decrypted at CA system A 40 for play on television set 44. Similarly, at new STB 136, the video is displayed and the encrypted audio is decrypted at CA system B 140 for play on television set 144. (Column 6, Lines 46-54).

In other words, while the "in the clear" video is delivered for direct display on television set 44, audio A and audio B (encrypted audio signal 106) are further processed prior to display on television set 44. Since the audio and video are treated differently, Candelore cannot teach or even suggest carrying out a PES header-dependent processing of data packets in a *video signal* 104 of Candelore based on the PES headers in the "start of frame" data packets in an *audio signal* 106 of Candelore, or vice versa.

Moreover, because of this disclosure of Candelore, the teachings of Candelore regarding an encryption scheme in which an audio signal 106 is encrypted while a video signal 104 is left "in the clear" cannot teach or suggest, "preparing the transport stream for a data extraction *by encrypting* at least some of the payload portions while leaving the one or more corresponding header portions *unencrypted at all times*," as recited in Claim 1.

Second, the fact that Candelore further discloses encryption based on "data structure encryption" also does not teach or suggest, "preparing the transport stream for a data extraction *by encrypting* at least some of the payload portions while leaving the one or more corresponding header portions *unencrypted at all times*," as recited in Claim 1. (Emphasis added). (Column 16, Lines 28-45).

Third, additional sections of Candelore also teach away from "preparing the transport stream for a data extraction *by encrypting* at least some of the payload portions while leaving the one or more corresponding *header portions unencrypted at all times,*" as recited in Claim 1. Specifically, in a "critical packet encryption" scheme disclosed by Candelore, the relevant portion states:

> In the system illustrated in FIG. 6, the cable system headend 322 selects A/V content 304 packets at a packet selector 316 for encryption. Packets selected for encryption are chosen so that their non-receipt (by a non-paying decoder) would severely affect the real-time decoding of a program, and any possible post processing of recorded content. That is, only critical packets are encrypted. *For the video and audio, this can be accomplished by encrypting "start of frame" transport stream packets containing PES (packetized elementary stream) headers and other headers as part of the payload,* since without this information, the STB decoder cannot decompress the MPEG compressed data. (Emphasis added). (Column 53-64).

Thus, for at least the above reason, the method recited in Claim 1 is not anticipated by Candelore. Further, since Claims 2-16 depend from Claim 1, they are allowable over the cited reference to Candelore at least due to their dependency, as well as due to additional limitations recited.

Claims 17-21

Claims 18-21 depend from Claim 17. Claim 17, as amended, recites:

> 17. A method, comprising:
> receiving a partially encrypted transport stream that includes one or more header portions, each of the one or more header portions being unencrypted at all times and including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more encrypted payload portions, wherein each of the unencrypted header portions enables the processing of the one or more corresponding encrypted payload

> portions based on at least one of the PES header and
> the frame header; and
>> extracting data from the transport stream in a manner that
>> bypasses the one or more encrypted payload portions
>> of the transport stream.

Applicant respectfully traverses this rejection. Specifically, Candelore does not teach or suggest, as recited in Claim 17:

> receiving a partially encrypted transport stream that includes one or more
> header portions, *each of the one or more header* portions *being*
> *unencrypted at all times* and including at least one of a packtetized
> elementary stream (PES) header and a frame header, and one or more
> encrypted payload portions, *wherein each of the unencrypted header*
> *portions enables the processing of the one or more corresponding*
> *encrypted payload portions based on at least one of the PES header and*
> *the frame header.* (Emphasis added).

Rather, Candelore discloses an encryption scheme in which an audio signal 106 is encrypted while a video signal 104 is left "in the clear." (Column 6, Lines 5-46). In other words, Candelore discloses that all the audio data packets are encrypted, while all the video data packets are unencrypted. Accordingly, *in arguendo*, Candelore may nominally disclose that "header portions" (*e.g.,* "start of frame" packets in the video signal) are unencrypted at all times, while also disclose that at least some of the "payload portions" (*e.g.,* data packets in the audio signal) are encrypted. (Office Action, Page 6, Paragraph 4, noting that Candelore meets the limitations of the subject matter of the original Claims 10-11).

However, this interpretation of Candelore is contrary to the other claim limitation of Claim 1, which recites, "each of the *header portions* includes at least one of a packtetized elementary stream (PES) header and a frame header, wherein each of the *header portions* enables the processing of the *one or more*

corresponding payload portions based on at least one of the PES header and the frame header." (Emphasis added).

In fact, the disclosure of Candelore teaches that video signal 104 and audio signal 106 are treated separately prior to being displayed on television set 44. Accordingly, it would not be possible to carry out a PES header-dependent processing of data packets in a *video signal* 104 of Candelore based on the PES headers in the "start of frame" data packets in an *audio signal* 106 of Candelore, or vice versa, as the Office Action suggests is taught by Candelore. This is evident in the following relevant portion of Candelore:

> After distribution through the cable system 32, the video, system information, program specific information, Audio A and Audio B are all delivered to set-top boxes 36 and 136. At legacy STB 36, the video is displayed and the encrypted audio is decrypted at CA system A 40 for play on television set 44. Similarly, at new STB 136, the video is displayed and the encrypted audio is decrypted at CA system B 140 for play on television set 144. (Column 6, Lines 46-54).

In other words, while the "in the clear" video is delivered for direct display on television set 44, audio A and audio B (encrypted audio signal 106) are further processed prior to display on television set 44. Since the audio and video are treated differently, Candelore cannot teach or suggest carrying out a PES header-dependent processing of data packets in a *video signal* 104 of Candelore based on the PES headers in the "start of frame" data packets in an *audio signal* 106 of Candelore, or vice versa.

Second, the fact that Candelore further discloses encryption based on "data structure encryption" also does not teach or suggest, "preparing the transport stream for a data extraction *by encrypting* at least some of the payload portions

while leaving the one or more corresponding header portions *unencrypted at all times*," as recited in Claim 1. (Emphasis added). (Column 16, Lines 28-45).

Third, additional sections of Candelore also teach away from "receiving a partially encrypted transport stream that includes one or more header portions, *each of the one or more header portions being unencrypted at all times* and including at least one of a packetized elementary stream (PES) header and a frame header, and one or more encrypted payload portions," as recited in Claim 17. Specifically, in a "critical packet encryption" scheme disclosed by Candelore, the relevant portion states:

> In the system illustrated in FIG. 6, the cable system headend 322 selects A/V content 304 packets at a packet selector 316 for encryption. Packets selected for encryption are chosen so that their non-receipt (by a non-paying decoder) would severely affect the real-time decoding of a program, and any possible post processing of recorded content. That is, only critical packets are encrypted. *For the video and audio, this can be accomplished by encrypting "start of frame" transport stream packets containing PES (packetized elementary stream) headers and other headers as part of the payload*, since without this information, the STB decoder cannot decompress the MPEG compressed data. (Emphasis added). (Column 53-64).

Thus, for at least the above reason, the method recited in Claim 1 is not anticipated by Candelore. Further, since Claims 18-21 depend from Claim 17, they are allowable over the cited reference to Candelore at least due to their dependency, as well as due to additional limitations recited.

Claims 22-26 and 28-30

Claims 23-26 and 28-30 depend from Claim 22. Applicant respectfully traverses the rejections of Claims 22-26 and 28-30. Specifically, Applicant

incorporates the reasoning presented above in response to the rejection of Claim 17 under 35 U.S.C. § 103(a), and respectfully submits that Candelore does not teach or suggest, as recited in Claim 23:

> analyzing a transport stream that includes one or more header portions, *each of the one or more header portions being unencrypted at all times* and including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more payload portions, *wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header*. (Emphasis added).

Furthermore, since Claims 23-26 and 28-30 depend from Claim 22, they are at least allowable for the same reasons that make Claim 22 allowable over the cited reference, as well as for additional limitations recited.

Claims 31-34

Claims 32-34 depend from Claim 31. Applicant respectfully traverses the rejections of Claims 31-34. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 17 under 35 U.S.C. § 103(a), and respectfully submit that Candelore does not teach or suggest, as recited in Claim 31:

> receive a partially encrypted transport stream that includes one or more unencrypted header portions, *each of the one or more header portions being unencrypted at all times* and including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more payload portions, and one or more encrypted payload portions, *wherein each of the unencrypted header portions enables the processing of the one or more corresponding encrypted*

> *payload portions based on at least one of the PES header and the frame header.* (Emphasis added).

Furthermore, since Claims 32-34 depend from Claim 31, they are at least allowable for the same reasons that make Claim 31 allowable over the cited reference, as well as for additional limitations recited.

Claims 35-38

Claims 36-38 depend from Claim 35. Applicant respectfully traverses the rejections of Claims 35-38. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 17 under 35 U.S.C. § 103(a), and respectfully submits that Candelore does not teach or suggest, as recited in Claim 35:

> an analyzer to determine which portions of a transport stream are to pass unencrypted, wherein the analyzer identifies one or more header portions, *each of the one or more header portions being unencrypted at all times* and including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more payload portions in the transport stream, *wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header.* (Emphasis added).

Furthermore, since Claims 36-38 depend from Claim 35, they are at least allowable for the same reasons that make Claim 35 allowable over the cited reference, as well as for additional limitations recited.

Claims 39-40

Claim 40 depends from Claim 39. Applicant respectfully traverses the rejections of Claims 39-40. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 17 under 35 U.S.C. § 103(a), and respectfully submits that Candelore does not teach or suggest, as recited in Claim 39:

> means for determining which portions of a transport stream are to pass unencrypted, wherein the analyzer identifies one or more header portions, *each of the one or more header portions being unencrypted at all times* and including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more payload portions in the transport stream, *wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header*. (Emphasis added).

Furthermore, since Claim 40 depend from Claim 39, it is at least allowable for the same reasons that make Claim 39 allowable over the cited reference, as well as for additional limitations recited.

V.   REJECTIONS UNDER 35 U.S.C. § 103

Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Candelore and U.S. 7,242,766 to Lyle (hereinafter "Lyle"). Claim 27 depends from Claim 22.

Applicant incorporates the reasoning presented above in response to the rejection of Claim 17 under 35 U.S.C. § 103(a), and respectfully submits that Candelore does not teach or suggest, as recited in Claim 22:

> analyzing a transport stream that includes one or more header portions, *each of the one or more header portions being unencrypted at all times* and

including at least one of a packtetized elementary stream (PES) header and a frame header, and one or more payload portions, *wherein each of the header portions enables the processing of the one or more corresponding payload portions based on at least one of the PES header and the frame header*. (Emphasis added).

Second, the deficiency of Candelore is not remedied by Lyle. Lyle's disclosures are related to the CTR mode of AES encryption. (Column 15, Lines 3-29). However, Lyle is silent with respect to the above recited element of Claim 22. Accordingly, the cited references to Candelore and Lyle, whether individually or in combination, do not teach, disclose, or fairly suggest every aspect of Claim 22.

Furthermore, since Claim 27 depends from Claim 22, it is at least allowable for the same reasons that make Claim 22 allowable over the cited reference, as well as for additional limitations recited.
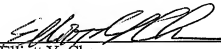
In closing, Applicant's decision not to discuss the differences between the cited art and each dependent claim should not be considered as an admission that Applicant concurs with the conclusions set forth in the Office Action that these dependent claims are not patentable over the disclosure in the cited references. Similarly, Applicant's decision not to discuss differences between the prior art and every claim element, or every comment set forth in the Office Action, should not be considered as an admission that Applicant concurs with the interpretation and assertions presented in the Office Action regarding those claims. Indeed, Applicant believes that all of the dependent claims patentably distinguish over the references cited. Moreover, a specific traverse of the rejection of each dependent claim is not required, since dependent claims are patentable for at least the same reasons as the independent claims from which the dependent claims ultimately depend.

CONCLUSION

Applicant respectfully requests that the above-proposed amendments be entered and that pending claims 1-8 and 10-40 be allowed. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: _12-13-07_

By: _____

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